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THE MUSHROOM GROWERS'
ASSOCIATION

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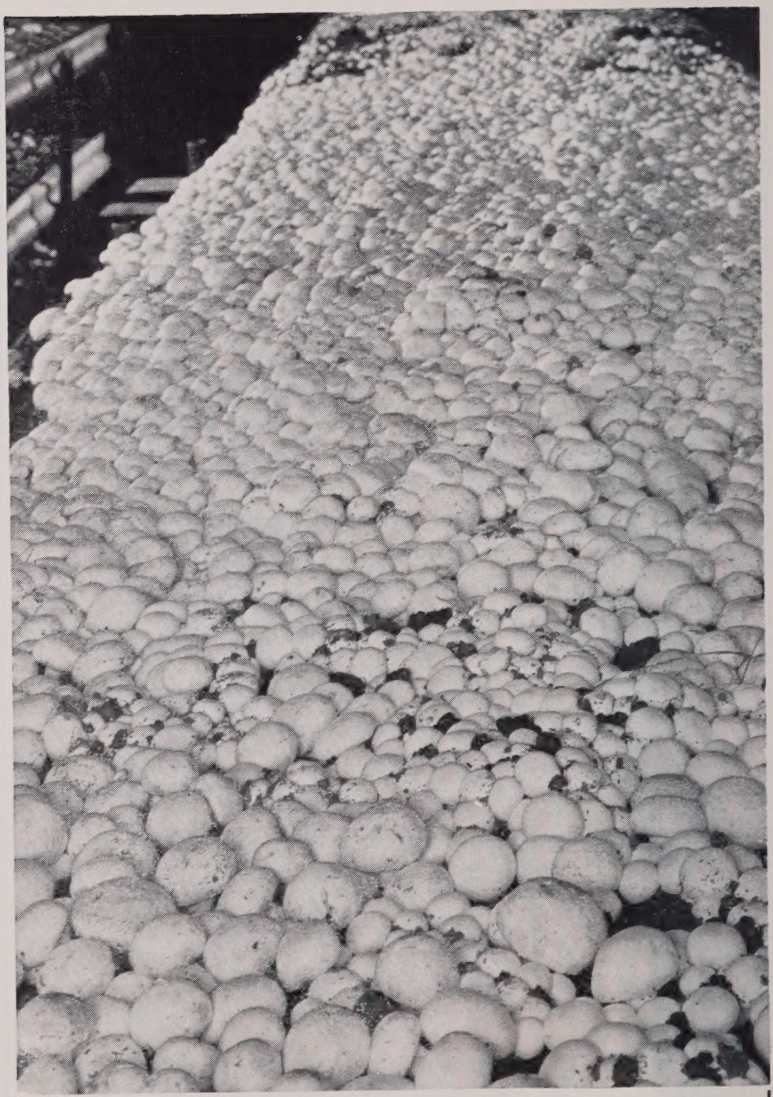

"YOU CAN'T KEEP A GOOD SPAWN DOWN"

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The
MGA BULLETIN

AUGUST 1956
NUMBER 80

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EDITORIAL

SHARING KNOWLEDGE

Speaking at the recent farm walk in Sussex, Mr. A. G. Linfield, head of that vast Sussex concern in which mushroom growing plays but a part, important and gigantic though that part is, rightly pinpointed the great advantage which growers to-day enjoy as compared with those who, up to but a few years ago were venturing into virtually unknown territory when embarking on the sea of commercial mushroom cultivation.

It was fitting that Mr. Linfield, with so many years of mushroom growing behind him, should point out to newcomers, old and young alike, that they were fortunate in being able to call on readily available knowledge to help them on their way, knowledge which was certainly not available until recent years.

By throwing open his farm to all MGA members, Mr. Linfield was practising that which he preached, for at one time it was virtually impossible for an outsider to even get his foot into a mushroom farm, let alone have a look round and ask questions.

In this spreading of knowledge, in this breaking down of the one-time impregnable barriers which surrounded the cultivation of mushrooms the MGA too has played a worthy part and the hope is that, as more and more comes to be known so that knowledge will be spread far and wide for one and all to benefit.

Nevertheless, spare a thought for those who, having acquired much of that knowledge, were faced with a none too easy problem. To keep that knowledge close and to maintain as far as possible a closed shop or to let others, possible and probable competitors, into the secrets. How many of us can honestly say that we should have chosen the latter and certainly the more difficult course? Give thanks then, that there were and still are those who, putting aside all selfishness, shared their knowledge and gave help and encouragement to newcomers. Give thanks also, because many of them are still among us, still ready and willing to share and share alike.

WRA.

THE INTERNATIONAL MUSHROOM CONFERENCES

DR. R. L. EDWARDS

On 1st November, 1949, I received a letter from Dr. P. J. Bels, then Director of the Dutch Mushroom Research Laboratory, which had results far more striking than I, or I imagine he, expected. In the letter he said that after reading an account of mushroom growing in other countries, Mr. G. de Bakker, Inspector of Horticultural Research in the Dutch Ministry of Agriculture, had suggested considering " the possibilities of a conference between investigators and growers of mushrooms in various countries." As a result, Dr. Bels suggested that a conference should be held in England in May, 1950, and that we should organise it, with Dr. Bels himself and either Dr. Lambert or Dr. Sinden as members of the first working Committee.

The suggestion made an immediate appeal and was promptly accepted ; Mr. F. C. Atkins became Chairman, myself Secretary, and we started planning. Dr. Bels suggested a membership of about 15 for the first Conference and " in case of satisfactory results we could have more members at a conference in 1951 " ; actually we had 41 members. The MGA gave us a rousing start with a dinner on the first evening and members of the Conference visited the Mushroom Research Station on its Open Day, Noble Mushrooms' farm and Mr. Stewart Wood's farm at Aylesbury. Our total budget was £41 !

The 31 papers read at the Conference were published by the MGA in *Mushroom Science I*, a heavy outlay for them at the time, which, I am glad to say, has since shown a modest profit, and is now out of print. It was intended that, as the title implied, the emphasis should be on scientific research and its application and contributions to mushroom growing. We have since been told in various "Pinheads" that there are none, but some of the papers published in *Mushroom Science I* were and still are of interest to practical growers. Among the subjects were eelworms, short composting, La France disease, the use of zineb and some of the new insecticides. There were also important papers of less immediate practical interest.

Our membership and budget at the First Conference look very modest beside the Second one with over 100 members, and the Third over 200.

An important result of this first Conference was that it brought most of the people studying mushroom problems into closer touch than ever before, widened our interests and stimulated our ideas. When the members departed we were well pleased with the result of this first venture, and we agreed that another should be organised three years later. No formal organisation was set up to cover the interval, but Mr. Atkins, as Chairman, was most anxious that the series should continue, and in due course Professor Willam, of the Belgian Mushroom Research Centre at Gembloux, agreed to his suggestion that the next Conference should be held there in 1953.

The Second Conference papers were more varied than those read at the first, ranging from surveys of commercial mushroom growing in

several countries, to purely academic studies of the amino-acids in mushrooms. Between these extremes there were some new and noteworthy contributions. All the papers were published, with the aid of a grant from the Belgian Government, in *Mushroom Science II*, which is distributed by the MGA and by corresponding organisations in some other countries.

The following table shows how the papers read at the First and Second Conferences can be classified. Perhaps I should explain my use of the three main headings.

" Practical growing " includes papers reporting on commercial growing in general or particular aspects of it, comparisons between methods in various countries, but not in any sense experimental, nor investigations such as planned studies of commercial crop records.

" Applied Research and Experimental " includes research directly on mushroom growing, pests and diseases studied on the mushroom crop, and studies of crop records for a definite purpose.

" Pure Research " includes papers on the mushroom as an organism and on other fungi, in which neither the experimental methods nor the results described are directly related to mushrooms grown as a crop.

SUBJECT MATTER OF CONTRIBUTIONS TO THE FIRST AND SECOND INTERNATIONAL CONFERENCES ON MUSHROOM SCIENCE

	First Conference Peterborough		Second Conference Gembloux	
Practical Growing		7		7
General	5		7	
Compost	2		0	
Applied Research and Experimental		24		18
General reviews	2		2	
Compost	6		5	
Casing	2		3	
Growing conditions	3		1	
Pests and diseases	6		5	
Economics	1		0	
Methods	4		0	
Spawn	0		2	
Pure Research		0		9
TOTAL		31		34

In general it seems to me that the spread of interests is a healthy one in both cases. It reflects the development of research programmes, in which a study of experimental techniques was necessary in the first few years at the new post-war Research Stations. Most of the pure research papers at the Second Conference were presented by Belgian

authors, the pure research side of their programme having developed most rapidly.

With three successful Conferences to look back on, it may be a suitable time to reconsider their objects and to look at their future.

The object of the First Conference, which I think is still the most important object of the series, was to provide an opportunity for exchange of results and information, and for discussion between research and advisory scientists and those growers interested enough to take an active part in the proceedings. Some of these growers had their own experiments to report and made important contributions to the Conference. A second object, which I think developed from the publication of *Mushroom Science I* and grew with the Second and Third Conferences, is to communicate the results of research to the growers. A third is to assist the flow in the opposite direction, of information about growers' problems, from them to the research workers. This is at present done rather informally, but could possibly be developed in the future.

Bearing in mind the primary emphasis on scientific aspects, I think it is reasonable that scientists should give their papers describing original research in scientific terms, and they should not be expected at the same time to give a layman's version omitting the technicalities. At Gembloux a few growers who went on the first day, when the programme happened to be especially technical, complained that the whole thing was far above their heads. Later in the week some papers dealt with practical subjects in more ordinary terms, and this part of the programme should have been more acceptable. At the Paris Conference, the programme said that some sessions would be highly technical and were intended for scientific workers. This was a good arrangement which should be repeated.

Although the first emphasis was and still is on scientific papers, the addition of some papers giving reviews in particular fields of research or commercial growing is most valuable and indeed is essential if growers' interest is to be maintained at the present level. We must hope therefore that the organisers of future Conferences will be fortunate in the range of papers offered them and wise in arranging their programme to provide for all needs.

Perhaps I may be forgiven for mentioning as an afterthought, that except for a limited number of reviews, papers can only be given when the work they describe has been done. It is the research work (or experiments for those who still dislike the term research) which must come first ; reading a paper on it is only a means of spreading the information.

Continued from opposite page

to determine the likely variation in different parts of a mushroom shed to guide us in experimental layout and statistical design."

We congratulate and thank Mr. Smith and Mr. Sheard on acting so promptly on the sanction given by NAAS headquarters.

M.G.A. Research Committee report on . . .

EXPERIMENTAL WORK ON MUSHROOMS

Plans for Yorkshire and Lancashire

There are three distinct phases in the integration of mushroom Science and Practice, and the MGA Research Committee is concerning itself with all of them : Research of a fundamental character, application of research findings at experimental station level, and introduction of subsequent recommendations to commercial growers.

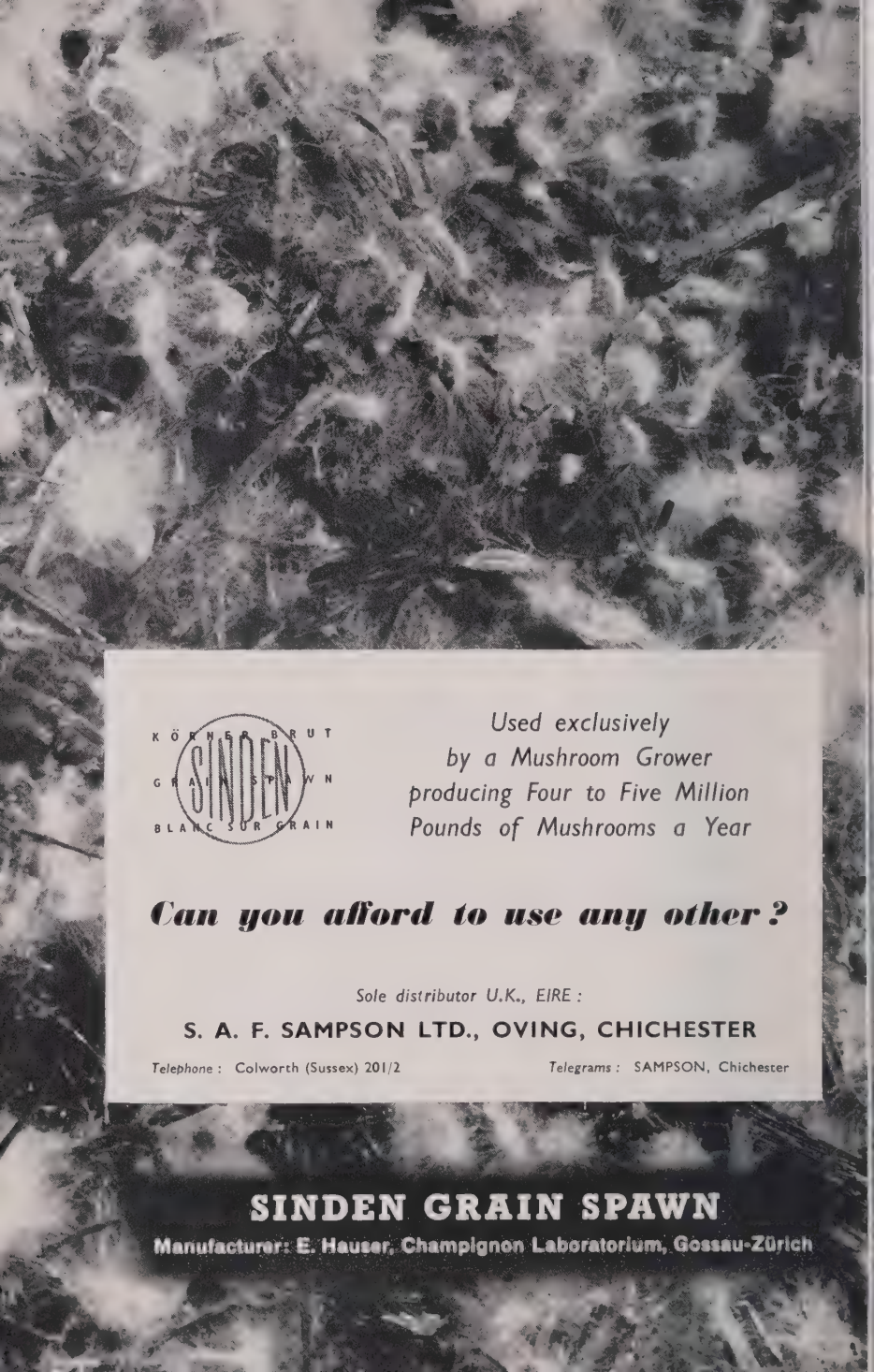
The protracted negotiations, planning and costing inevitable where public money is being spent are now well advanced, and it is hoped that this year will see the erection of a Mushroom Unit at the Glasshouse Crops Research Institute at Littlehampton. We shall be giving much fuller information in a subsequent Report. In the interim Mr. Peter Flegg and Miss Doreen Gandy are to work within their severe limitations.

The MGA Committee has had a number of discussions in various parts of the country, and especially with **Mr. C. E. Hudson,** horticultural head of the NAAS. Mr. Hudson tells us that "*experimental work on the mushroom crop*, as distinct from research, is *part of the planned programme of the NAAS Experimental Horticultural Stations*. These Stations are only in process of establishment and the scope of their work must be limited by the development of the stations and the staff available.

"All the experimental work is carried out under the Agricultural Improvement Council and its Experimental Horticulture Committee. Much of the work is an extension and trial of the findings of research stations under commercial conditions in different districts."

By the nature of things it must be some time before Littlehampton is in a position to offer suggestions for mushroom trials, and we sought approval of the suggestion that mushrooms might soon be grown at one or two NAAS stations. Not only would a period elapse before the staff mastered the very different cultural techniques required, but there were many problems posed by research already done elsewhere. The NAAS agreed at once.

Mr. F. G. Smith, director of Stockbridge House Experimental Horticulture Station, Cawood, Selby, Yorkshire, put down a compost in July in order to grow one crop before Christmas in a rhubarb shed. "Our first task will be to satisfy ourselves that we can produce a reasonable crop before we consider the introduction of complicated experimental treatments," he tells us. "The amount of work we are able to do will depend entirely on our ability to recruit suitable farm staff." **Mr. G. F. Sheard,** director of Fairfield Experimental Horticulture Station, Esprick, Kirkham, Preston, Lancashire, hopes to start very shortly on the first section of the Mushroom Unit there and to put down his first compost before the end of the year. "I should like to do some calibration work first, growing a straightforward crop in order



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LARGE GATHERING AT SUSSEX FARM WALK

Great Opportunities Still—*says* MR. A. G. LINFIELD

Mr. A. G. Linfield, head of Messrs. A. G. Linfield Ltd., the Sussex mushroom growers, gave considerable encouragement to young growers on the occasion of a farm walk organised by the Mushroom Growers' Association, held at Messrs. Linfield's Chesswood Nurseries, Thakeham, on Wednesday, 11th July.

The visitors numbered about 300 and this was one of the greatest outside gatherings ever organised by the MGA.

Speaking after tea, and just before the visitors departed, Mr. A. G. Linfield, said: " I remember when we started growing, so little help was available. Now, through the MGA and other sources, every assistance is given to mushrooms growers. The opportunities to-day are just as great as ever. The ball is at your feet. Take advantage of your opportunities, show enterprise and master your subject then I am confident you can, and will, make a go of it."

Two of the most experienced mushroom growers in the country, Mr. A. G. Linfield, whose father started mushroom growing in 1882, *and Mr. A. G. Pointing, Managing Director of Agaric Ltd., growers in caves at Bradford-on-Avon since* 1914.

When the company assembled for the farm walk, Mr. A. G. Linfield, made a short speech of welcome, in which he outlined the history of the firm.

His father, he said, started the mushroom nursery at Worthing, with one small glasshouse, when very little, if any, outside help and advice was available. This was in 1882, and from that small beginning the present organisation had grown. He said that like other mushroom growers, his farm had had its ups and downs from time to time. They were particularly indebted to Dr. Sinden and Mrs. Hauser for their great help and assistance, and he felt that this tribute to them was only right and proper. He went on to explain the lay-out of the undertaking at Chesswood Nurseries, and said, in addition to the production of mushrooms numbering between 4,000,000 and 5,000,000 lb. each year, the firm produces roses, carnations, orchids, lettuce, and also some 5,000 bacon pigs each year and 20,000 turkeys. In addition, 800 acres of land were farmed. Mr. Linfield expressed the hope that everyone present would find the visit interesting.

Mr. G. W. Baker, Chairman of the MGA, also welcomed the visitors and on behalf of the MGA expressed thanks to Messrs. A. G.

Linfield Ltd. for their hospitality. He welcomed new members.

The party, as a whole, made its way first to the large composting yard and thence to the peak-heating rooms and on to the building where peat and chalk in equal parts by volume (the chalk $\frac{1}{4}$" to dust) was being mixed for casing. The party then divided into three and made a close inspection of this enormous tray system farm, which holds to a tight 10 week complete cropping schedule from the time of filling to emptying, and which produces now an average of 2 lb. per sq. ft. per crop or 10 lb. per sq. ft. per year.

Air conditioning is practised to a very high degree on this farm and there are no less than 12 miles of air ducts, all of which are made on the farm.

The tour of inspection also included a visit to one of the large piggeries maintained by the Linfield organisation, this piggery in particular housing 1,000 pigs, including 100 breeding sows. Horse manure, pig manure and poultry manure form the basis for the compost in use at the Chesswood Nurseries.

The huge composting yard with its two gigantic compost machines each of which is capable of turning 200 tons in an $8\frac{3}{4}$ hour day, attended by only two men, was the object of particular interest and attention. The

As was expected the two giant composting machines attracted great interest, with machines and compost subject to close scrutiny.

high level of mechanisation and the tremendous amount of organisation which inevitably go into a staggering undertaking of this kind, were favourably commented on.

After the tour of inspection, the visitors were entertained to a sumptuous tea in the new canteen. It was after tea that Mr. Linfield gave his words of encouragement to younger growers in particular. On behalf of the visitors he was cordially thanked by Dr. Charles Kark, of South Africa.

Earlier that day, Mr. Jim Linfield, Managing Director of Messrs. A. G. Linfield Ltd., had taken the members of the MGA Executive Committee around, and afterwards entertained them to lunch at the Roundabout Hotel, West Chiltington. Suitable thanks were expressed on behalf of the guests.

In the evening, the MGA Executive Committee, with visitors from abroad, were again entertained at the Roundabout Hotel.

STANLEY MIDDLEBROOK'S

PINHEADS

113 An eye-witness of this true (?) incident must unbelievably have allowed his eyes to wander from the subject under - er - review. During the recent International Conference a group of lecture-worn mushroom growers sought solace in the most dazzling of Parisian night clubs. As the floor show reached its climax and the parading " down to Nature " beauties passed within inches of the crowded tables four growers were seen to be in earnest discussion of some technical cultivation problem, oblivious of the proximity of natural beauty, and a fifth was fast asleep !

114 I don't think there's anything in this, but you never know—mushrooms being what they are. A grower tells me that if he uses the same spawn in the same house crop after crop he gets a progressive reduction in crop, whereas if he uses two spawns and crops them alternately the results remain consistent. And this despite thorough clean up and fumigation between crops.

115 It is 8 years or so since I first suggested to the intelligentsia that there must be some unknown " outside " factor influencing mushroom growth. Neither air movement nor humidity seemed to account for sudden spurts or sudden cessations of activity. Would they listen ? Would they ? There was scornful derision of my suggestions and undisguised pity for the abysmal ignorance of a mere grower who dared to ask if barometric pressure could have any effect on our culture. The great teachers of the time including those masters Atkins and Dr Sharpe joined me right well, sent me back to do more " prep." and threatened expulsion from the new school of advanced thought. Some two years ago, Atkins was brought round to the view that seasonal variation in cropping should have an explanation (he will recall being prodded by me on a well-remembered train journey from Chichester to London) and set about a gigantic piece of investigation which reached its climax in his recent Paper at the Paris Conference. Arising out of this Paper, I understand, several scientists of International renute expressed the view that atmospheric pressure changes could vary the rate of growth in the beds, or the activity taking place in compost heaps, etc. Interesting support is given to the theory by the unusual happenings of the week-end 7th — 8th July. High temperatures, it was said, forced cropping too quickly in England. This was adequately commented on at the Limfield Open Day. Guy de Man told me that exactly the same thing happened in the French caves at the same time. At Thuksenum and elsewhere in England and France the surface air temperatures were very high at that time, but in the French caves temperatures don't vary more than a degree or two all the year round. The sudden spurt of production in the caves was not caused by high temperatures but by something else. Air pressure, perhaps ? I gather that at last certain Research Centres you can get your wife they're not in England—here is collaborate on a study of the problem. Which is all to the good ; but it's a pity that people in positions of high authority should take years to recognise a problem that to simple common minds lived out five thousand years ago.

116 Here's another suggestion which is pooh-poohed to-day but will be claimed by Scientists in 10 years' time to be an entirely new approach. I submit that the best crops are obtained from a precise moment of casing and that this moment is determined by the at present unknown proper relation between the spawn growth already in the compost and the amount of compost still to be penetrated. This naturally presumes good compost, good casing, and proper treatment and so on. Laugh that one off, Experts. O.K., I'm used to it.

117. The surface of cresylic acid in an open tank (used for board dipping) is literally covered with drowned floating flies to-day (17th July). I just daren't undertake a close inspection for fear they may prove to be what they look like –Cecids. If they *are* Cecids their presence in the liquid suggests the air around the place must be badly infested and it's quite beyond my courage to contemplate or try to conquer such a concentration.

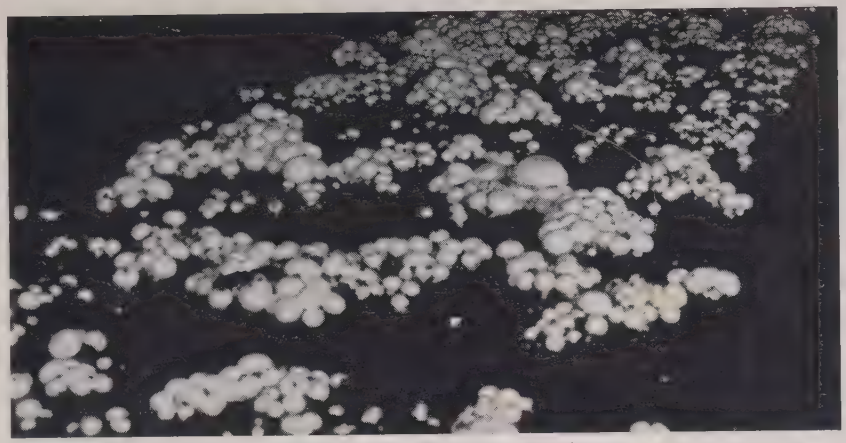
118. It isn't true, of course. There is no such place as Linfields at Thakeham or elsewhere. Three hundred honest, hard-working, clear-minded citizens had a dream. You can't fool all of three hundred people all the time. We certainly never saw vast machines turning vast quantities of compost in a matter of moments ; we never saw thousands of sq. ft. of immaculately clean trays ; we never came away with pockets full of dead matches and cigarette ends which if dropped would have constituted a major litter problem. That lavish hospitality –was ever such a tea served ! – just couldn't have been true. The whole thing was out of our world. We never beheld selected samples of said citizens caught up by rampaging fork trucks ; we never heard the unforgotten, unforgettable cries of an unwanted spawn merchant ere he succumbed to his trapped fate in a peak-heat emporium. We woke up when we got home. The omnipresence of weeds on our roadways, compost in our gangways, peat on our floors, diseased roots in our beds, cracks in our concrete, holes in our roofs, gaps in our production . . . . . these homely signs make us certain we never really went to Thakeham. And yet at least two travellers have told me they saw me there. Incredible. Unbelievable. Other writers must try to do justice to the magnitude and efficiency of the vast Linfield organisation. Words fail *me*.

119. Mr. A. G. Linfield, in his acknowledgment of thanks after tea, consciously and jocularly (as I want to believe) referred to my self-effacing work as " Pinpricks." He set something in motion. Ever since then I've been called " Mr. Pinprick " by all and sundry. Most unkind, I think. I cannot recall ever offending anybody, even by a pin prick, except perhaps a few deserving cases such as spawn people, manure suppliers, scientists, tray cranks who never do less than 2·5 seven times a year, Government officials, tax collectors, sundriesmen, travellers, unprincipled writers, Editors, untruthful mushroom growers, growers who maintain only wishful-thinking records, boiler-makers, and Mr. Fred. C. Atkins. The rest I have left severely alone ; indeed one isn't in the habit of pricking one's own bubble !

120. Ref. Pinhead 109. The special bed with 1·4 in its first flush did 2·6 by the end of the second and was 3 lb. at 22 days. Then it collapsed, reaching only 3·55 in the next 20 days. Another house –whole house as against only one bed – has done 1·36 in its first flush and ·85 in the second, with 1 lb. in 4 days and 2 lb. in 12. It is now just under 3 lb. in 28 days. Good as these are they are far from the 2 lb. in a first flush of my target, and though I've five bob on it with my manager I fear it can't be done. But a 1·36 first flush from a whole house, including bottom beds and bed ends, is not too bad, and I'll swear many of the areas must have picked " at the rate of " well over 2 lb. per sq. ft.

121. After a sumptuous Cocktail-cum-Buffet party given to Executive Committee members on the evening of the Linfield Open Day by Jim Linfield, several members left late at night for Oxted, ready for the Executive meeting the following morning. One member, who must be nameless, told me of his eventful journey. " He blew a back axle, sheared his radio, punctured a sparking plug ; his tyres oiled up and he had to be towed but the rope broke, and every time he blew his horn all the lights went out." Yes, it was a good party, but do *tyres* oil up ?

MOUNT PURE CULTURE SPAWN



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(Photo by F. Bleazard)

The MGA (United Kingdom) party seen on the cross channel boat.

(Below) The official opening of the French Research Station at Montesson, performed by M. Renard.

(Photo by G. de Man)

(Photo by G. de Man)

Quite a large company took advantage of M. Sarazin's (seated centre) invitation to visit his spawn plant near Paris.

(*Below*). *A general view taken after the opening of the French Research Station at Montesson.*

(Photo by G. de Man)

(Photo by F. Bleazard)

Visiting one of the many chateaux. G. W. Baker and Herr Hullen (West Germany) are together in the centre.

TH
INTERN
CONF

THE LOI

PARIS

F. Bleazard pictured here with some French girls in traditional costume. They served wine at that wonderful open-air luncheon.

A highlight of the Loire tour was the
magnificent cold luncheon served with
by Monsieur V. L

(Photo by Mrs. Bleazard)

RD
TIONAL
RENCE

VALLEY

(Photo by Mrs. Bleazard)

Great interest was taken in the extensive mushroom growing caves of M. Vrain at Dampierre. In the centre is Miss Ingrid Ohman (Sweden) with others outside the composting shed.

(Photo by G. de Man)

tasting at Montsoreau, followed by a ent wines of the Loire Valley provided d (on 22nd June).

JUNE, 1956

Outside the caves with M. Vrain in the centre. Mr. Stridsberg (Sweden) is advancing to take a picture of the group.

(Photo by F. Bleazard)

Pictured during one of the lecture sessions in the Natural History Museum, Paris, are the United Kingdom delegation.

There is an international flavour about the picture which shows, left to right G. de Man (Belgium), Dr. Chas. Kark (S. Africa), Fred. C. Atkins (United Kingdom) and Imre Heltay (Hungary).

(Photo by F. Bleazard)

There was a strong representation from West Germany. Facing the camera in the foreground is M. Dekeriel, Secretary of the French Federation, whilst M. Sarazin, new Life Member of the MGA, is on his left (seated). Addressing the conference is C. Riber Rasmussen (Denmark). The head of Fred. C. Atkins, International Conference Standing Committee Chairman, is in the foreground.

IN SESSION

French and Belgian delegates are seen with two of the lady interpreters in the foreground on the extreme right and left.

QUEEN MOTHER TO OPEN AGRICULTURE HOUSE

For the second time within two years the MGA office has moved for, as from 30th July, this Association's office has been located at Agriculture House, Knightsbridge, London, S.W.1, new and imposing seven-storeyed home of the National Farmers' Union, of which the MGA is a specialist branch.

Prior to this move the National Farmers' Union offices had been at 45 Bedford Square, London, W.C. 1. The rapid growth of the NFU coupled with the increased staff to deal with the additional work has led, over recent years, to the extra housing of several NFU departments at various addresses in and around Bedford Square and the provision of new offices will mean that the entire staff will be housed in one building.

In actual fact about half the new building will be used for accommodating the NFU staff with part of the remainder occupied by the Fatstock Marketing Corporation.

To many, and this includes some of the older members of the NFU staff in particular, this move will be accompanied by rather more than a tinge of regret for Bedford Square, home of the NFU since 1919 is, after all, one of the most attractive spots in London where time, to a great extent, has stood still.

It was in November, 1954, that the MGA office was moved from Yaxley, Peterborough, to London.

The new address of the MGA is now The National Farmers' Union, Agriculture House, 25-31 Knightsbridge, London, S.W. 1 (Tel. Belgravia 5077).

Agriculture House which is to be officially opened by Her Majesty, Queen Elizabeth the Queen Mother, on Thursday, 18th October.

FARM WALK FOR NORTHERN IRELAND

AND ONE IN SURREY TOO

Two further farm walks have been arranged, one in Northern Ireland and the other in Surrey.

That for Northern Ireland takes place on Saturday, 22nd September, and will embrace two farms, that of Mrs. Young at Mountsandel Nurseries, Coleraine and the other at the farm and canning plant of the Monlough Food Production Co. Ltd. (Mr. Robert Patterson), of Ballygowan, Belfast. As present arrangements stand the farm of Mrs. Young will be visited first and later that of Mr. Patterson.

All MGA members are invited, but whilst special invitations will be sent to members in Northern Ireland and Eire, those residing in England, Scotland and Wales who wish to make the trip should apply to the MGA Secretary for details regarding travel, etc.

A farm walk will also take place on Saturday, 6th October, at the Oxted farm of the Broadham Produce Co. Ltd.

*"Quot Homines, Tot Sententiae"**—

and the Latin tag was never truer than when applied to mushroom growers and their methods of composting! From the ultra-short brigade, through the two-phase gentlemen to those who stick to traditional methods there is almost infinite variety in such matters as numbers of turns, period between turns, length of peak heat, temperature and so on. There are variations on a theme such as the triangle men, those who extol the virtues of the split lump, and more recently, the 'no-composting-at-all' school of thought. All these earnest seekers after truth pursue the same goal—more pounds of mushrooms per unit of imput.

It is a good thing that in such a divided world they have *one* factor upon which they can rely, no matter what method of composting they follow. Whether the medium is short or long, DARLINGTON'S 100% SPAWN will give consistently good results.

* "*There are as many opinions as there are men.*"

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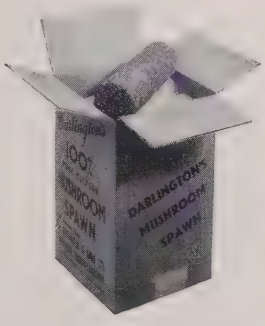

CORRESPONDENCE

If Mr. McMichaels privately picks his mushrooms with a manure turner, I don't mind. But he ought not to tell anyone. Now his privately understood " efficiencies " may well have their uses for him, but it would be a little unfair of him to claim that figures such as he presents illuminate the comparison of tray with shelf culture in any way.

High percentages impress. But what do they mean ? And what are we to understand by paddling along at 20% efficiency ? I suggest that Mr. McMichaels takes a step into some deeper water and shows us some clearer comparisons. After all, no shelf grower is worried with 2 lb. in 4 weeks, even if it does represent 50% (apparently the vital figure) of his picking. And he wouldn't mind waiting ten weeks for the other half. 4 lb. twice a year will take a lot of beating.

Though he can point to the shelf grower's house when it is not cropping, has he never realised that the shelf grower will always be able to point to a tray house which is never cropping ! Let us have a comparison which is to the point—and all the more interesting for having come from across the Atlantic where, I imagine, tray growing is one of the favoured " inevitables." E. H. PALFREY.

Other Fungi ? Mr. J. R. Huntington should have been at the Paris Conference. He would then have learnt something about the experimental cultivation of *Volvaria*, *Pholiota*, *Tricholoma*, *Lepiota* and other species, AND Morels. But I know my limitations ; what remains of my life is absurdly insufficient for the studies on aspects of the cultivation of *Psalliota hortensis* which I contemplate. I know next to nothing about " our " mushroom—and it has taken me nearly 20 years to learn that ! To start more or less from scratch with a totally different fungus requires a degree of courage which is, I confess, beyond me. F. C. ATKINS.

Food Value of the Mushroom—and Publicity

Although I am second to none in upholding the food value of the mushroom whenever the question is raised, I have never considered it of much use as a basis for publicity, particularly to the extent of extolling the mushroom as a source of particular vitamins. It has occurred to me recently that we might well learn from some people who probably spend more on publicity in a week than we are ever likely to spend in a year—the Brewers.

They have an excellent nutritional story to tell for beer, which is very rich in several of the B vitamins, but how do they use it ? They do not go further than general statements of the " Guinness is good for you " type. If they and their publicity advisers thought a list of vitamins was a good selling point we may be quite sure they would use it. As they do not, my conclusion is that in their expert opinion it is not worth using, and we can very well learn from their example.

R. L. EDWARDS.

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FOOD FAIR—VOLUNTEERS REQUIRED

As part of the Publicity drive the MGA is exhibiting at the British Food Fair, which takes place at Olympia, London, from Tuesday, 28th August, until Saturday, 15th September.

Mushrooms will be prominently displayed on the huge National Farmers' Union stand, which will display produce of all descriptions produced on British farms.

Various branches of the industry as a whole, are supplying volunteers at the information centre attached to the stand. Any MGA member willing to do a tour of duty for a whole or part of any day should communicate with the MGA Secretary as soon as possible, giving dates and times when they are willing to attend.

STANDING COMMITTEE, I.C.M.S.

The Standing Committee for International Conferences on Mushroom Science has been appointed as follows :

President : Fred. C. Atkins (*England*) ;
Secretary : Dr. P. J. Bels (*Holland*), in place of Dr. R. L. Edwards (*England*), who has resigned ;
Committee : Andre Sarazin (*France*) ;
Prof. A. Willam (*Belgium*) ; and
C. R. Rasmussen (*Denmark*).

Many friends of Dr. Pieter J. Bels, the Dutch scientist, welcomed him back to Europe when he attended the Paris Conference after his sojourn in Canada.

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NEW LIFE MEMBER

The Executive Committee has appointed Monsieur **André Sarazin,** of Carrières-sur-Seine, near Paris, a Life Honorary Member of the Mushroom Growers' Association of Great Britain and Northern Ireland.

In making the announcement at the opening of the Third International Conference at Versailles in June, Mr. G. W. Baker said it was the highest honour the MGA could pay anyone. Monsieur Sarazin thus joins the company of Dr. E. B. Lambert, Dr. J. W. Sinden, Dr. R. L. Edwards and Mr. F. C. Atkins, whose exceptional services for the Mushroom Industry have been similarly " recognised " by the MGA.

Monsieur Sarazin belongs to the sixth generation of the Sarazin family of mushroom growers, but apart from growing he has established an outstanding reputation in Europe as a spawn maker. For over 20 years, since graduating in Paris, he has been fascinated by the complicated physiology of mushrooms, and his studies in this esoteric field, published by the MGA in 1955 under the title, *The Cultivated Mushroom*, have consolidated his world-wide reputation.

Licencié ès Sciences, Paris ; founder-president of the French Federation's Technical Commission ; Member, Permanent Committee for International Conferences ; Life Honorary Member of the MGA ; a few days ago appointed Chevalier du Mérite by the French Government ; and a wise and generous friend. Hobbies : Mushrooms, music and the sea.

The mushroom illustrated has a stipe which is both abnormally *thick* as well as long. This is not immediately apparent without accurate measurement and shows the unreliability of classification by visual means only.

The normal dimensions of the stipe are shown by the dotted line *Ref.: MGA Bulletin No.* 79 " *What is a Normal Mushroom*" (*D. G. Gandy & P. B. Flegg*).

André Simon addressing the gathering with G. W. Baker (MGA Chairman) on his left.

PUBLICITY DRIVE MAINTAINED

Women Journalists at Farm Walk

In an effort to bring women journalists and particularly cookery experts, as near as possible to the subject of mushroom growing, some 35 such journalists were entertained by the MGA at the mushroom farm of The Broadham Produce Co. Ltd., at Oxted, Surrey, on Monday, 11th July.

The presence of André Simon, leading gourmet and President of the Food and Wine Society, who was guest of honour, lent just that final touch to what was, by general consent, an outstanding occasion.

Fortunately the weather was fine and the guests were conveyed from the Women's Press Club, London, to the farm by special coach where they were received by Mr. G. W. Baker, MGA Chairman who, in partnership with Mr. A. D. Jones, owns the farm. Also on hand to receive the distinguished company was Mrs. Baker.

Representing as they did some of the leading publications in this country, including too both representatives of sound radio and television, the guests made up a fine cross section of those who, by profession, educate the general public in matters appertaining chiefly to cooking and also to a lesser degree, horticulture and farming.

On arrival the guests were entertained to refreshments in the soil shed before sitting down to an excellent lunch (arranged by Raymond Thompson) in the packing shed.

In a short talk M. Simon spoke of the wonderful part mushrooms played, and could play to a much greater degree, in the food of the nation and the world. They had that day, he said, had a delightful sample of mushrooms for lunch. He himself didn't know and really didn't much care what vitamins mushrooms contained but he did know that mushrooms lent a most rewarding flavour to all dishes. He did not think that anywhere near enough attention was paid to mushrooms cold—in salads and so forth—and he hoped that, as a result of that day's visit a great deal would be done to further popularise the mushroom.

Thanks to the MGA were expressed on behalf of the guests by Elizabeth Craig, leading writer of matters culinary. It was, she said, both a memorable lunch and a memorable day. She was quite sure much good would result. Short talks were given by Mr. Baker and by Mr. G. V. Allen (MGA Vice-Chairman).

Afterwards the guests, in small parties, toured the farm accompanied by members of the Publicity sub-committee who explained the various processes.

This farm, with its mechanised tray-shelf system embracing a basic area of 25,000 sq. ft., lends itself particularly to events of this kind and the visitors appeared much impressed with everything.

Before leaving each guest received a presentation pre-pack of mushrooms together with books and leaflets containing mushroom recipes.

It is well worthy of note that, on the luncheon menus, there was a brief printed history of the mushroom industry in general together with some short, useful notes, on the main methods of growing and on the system operating on this Oxted Farm.

There is not the shadow of doubt that the publicity impact, worked for by the Publicity sub-committee, was achieved to an even greater degree than had been expected. Events will doubtless prove that this publicity foray was the MGA's most successful effort to date.

G. W. Allen, MGA Vice-Chairman, explains the whys and wherefors to some of the visitors.

MGA PUBLICITY SCHEME

Both the Executive Committee and the Publicity Sub-Committee acknowledge with pleasure the following contributions to the Publicity Fund. All concerned on the MGA side of this effort are gratified at the fact that, in the case of many contributors, it is an expression of renewed support and confidence in the efforts being made by the Association to further publicise the cultivated mushroom.

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Wm. Artindale & Son Ltd., Salesmen, Castlefolds Market, Sheffield	18	9	0
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LAST MONTH'S PUBLICITY CONTRIBUTIONS

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*†S. A. F. Sampson Ltd., Spawn Merchants, Oving, Sussex	–	–	–

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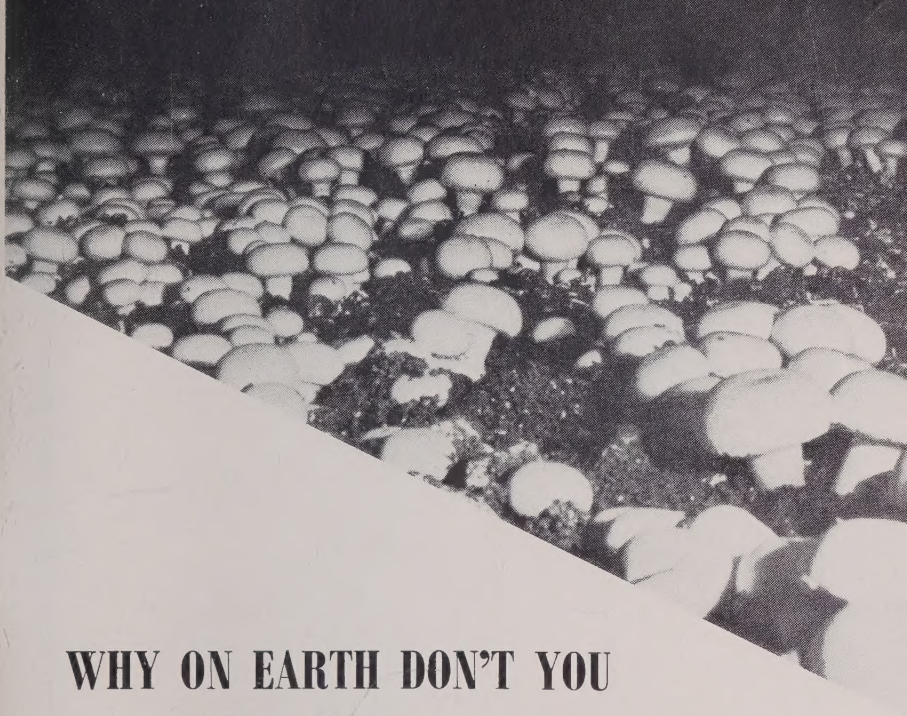

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